

**Title: METHOD AND SYSTEM FOR DIRECTING FLUID FLOW**

**Inventors: Harrington, et al.**

**Docket No: 1002.2US01**

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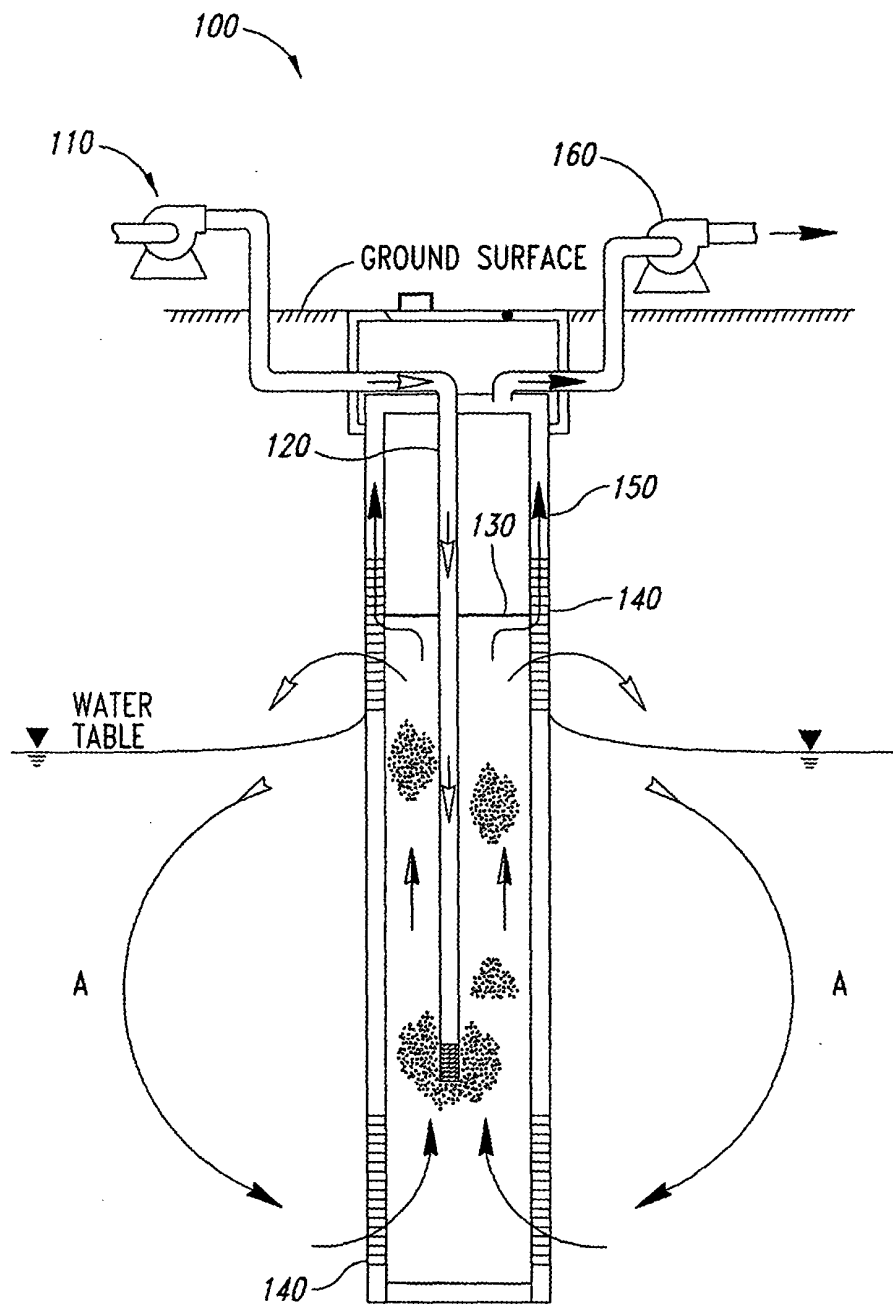


DIAGRAM KEY FOR WATER FLOW	
VOC CONTAMINATED	→
TRANSITION	- - - →
UNCONTAMINATED	→

**FIG. 1**  
**(Prior Art)**

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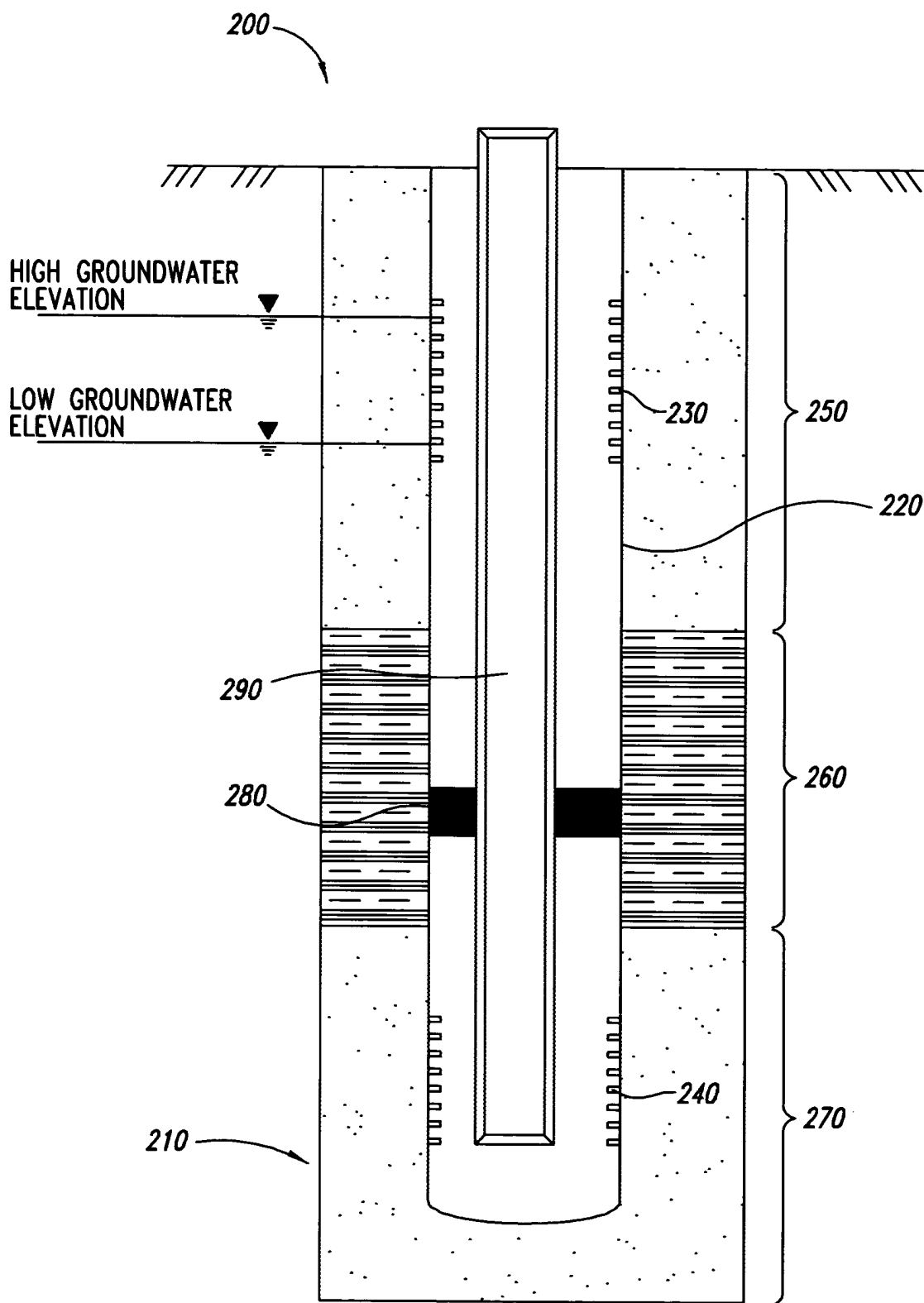
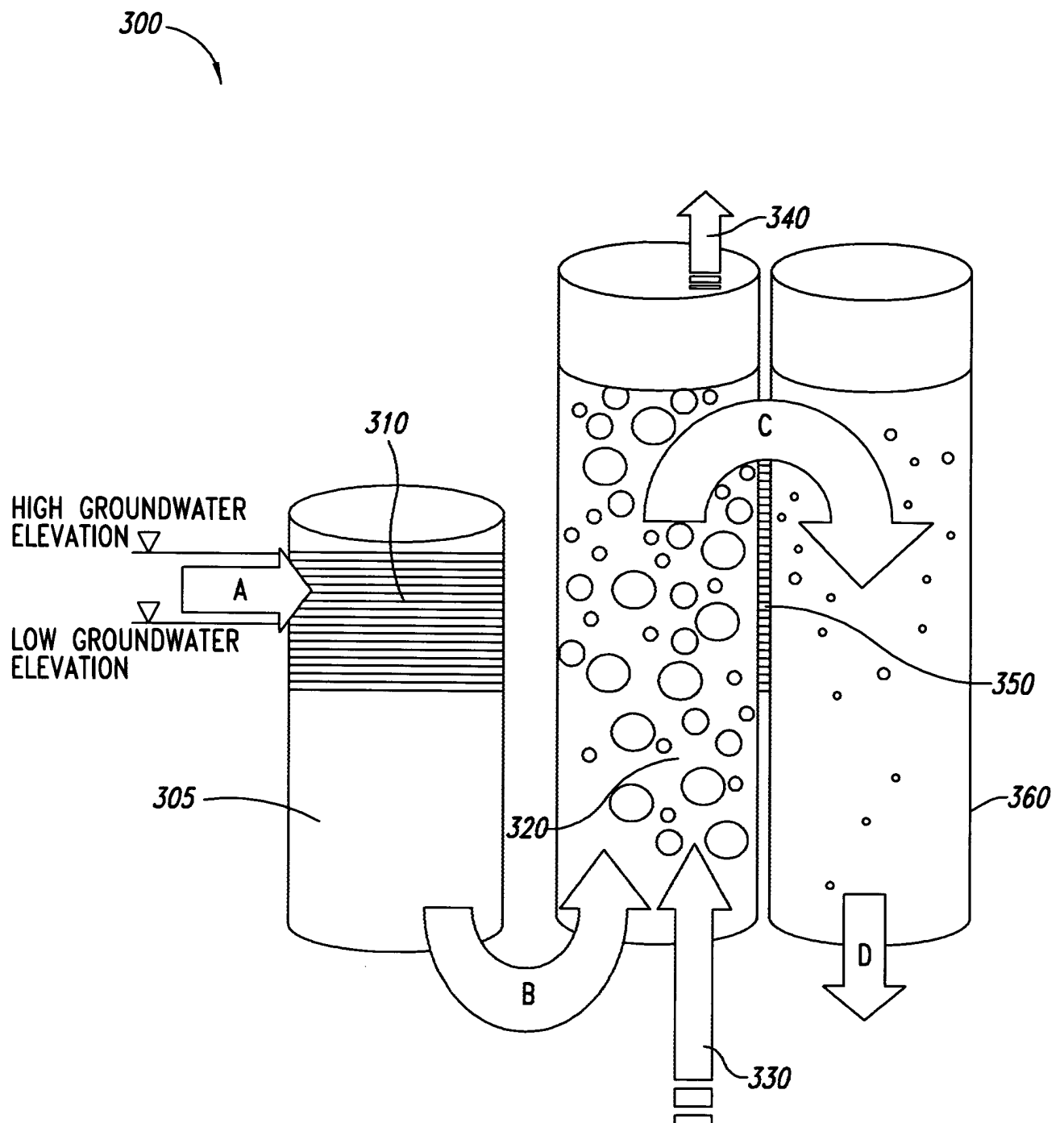


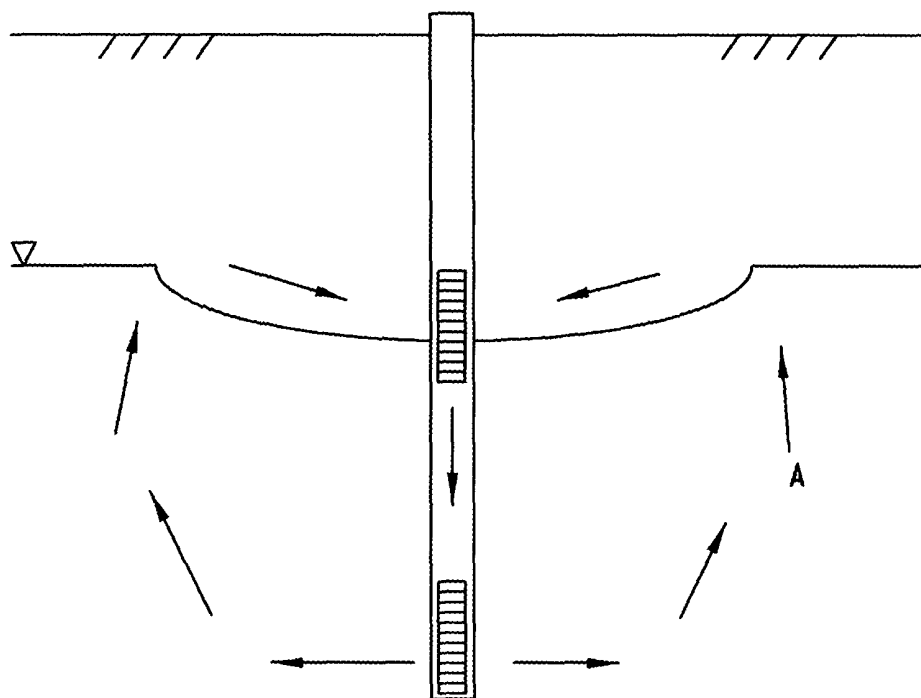
FIG. 2

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**FIG. 3**

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**FIG. 4**

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**FIG. 5**

A detailed cross-sectional diagram of a groundwater remediation system 500 installed in a well 517. The well penetrates through various geological layers, including a sand layer 518, a clay layer 515, and another sand layer 520. A horizontal line indicates the GROUND WATER TABLE. Two vertical tubes are shown: an outer tube 550 and an inner tube 560. At the top of the well, there is a cap assembly 510 with several ports. An AIR PUMP is connected via port 558 to the annular space between the tubes near the surface. An OFF-GAS vent is connected via port 554. Port 546 connects to the inner tube 560. Port 556 is at the very top of the inner tube. Inside the inner tube 560, there is a central air distribution pipe 559 with multiple small outlets 564. Arrows indicate air being pumped down the inner tube and distributed into the surrounding groundwater through the side ports 542 of the outer tube 550. A dashed line 557 shows the path of air or gas flow within the inner tube.

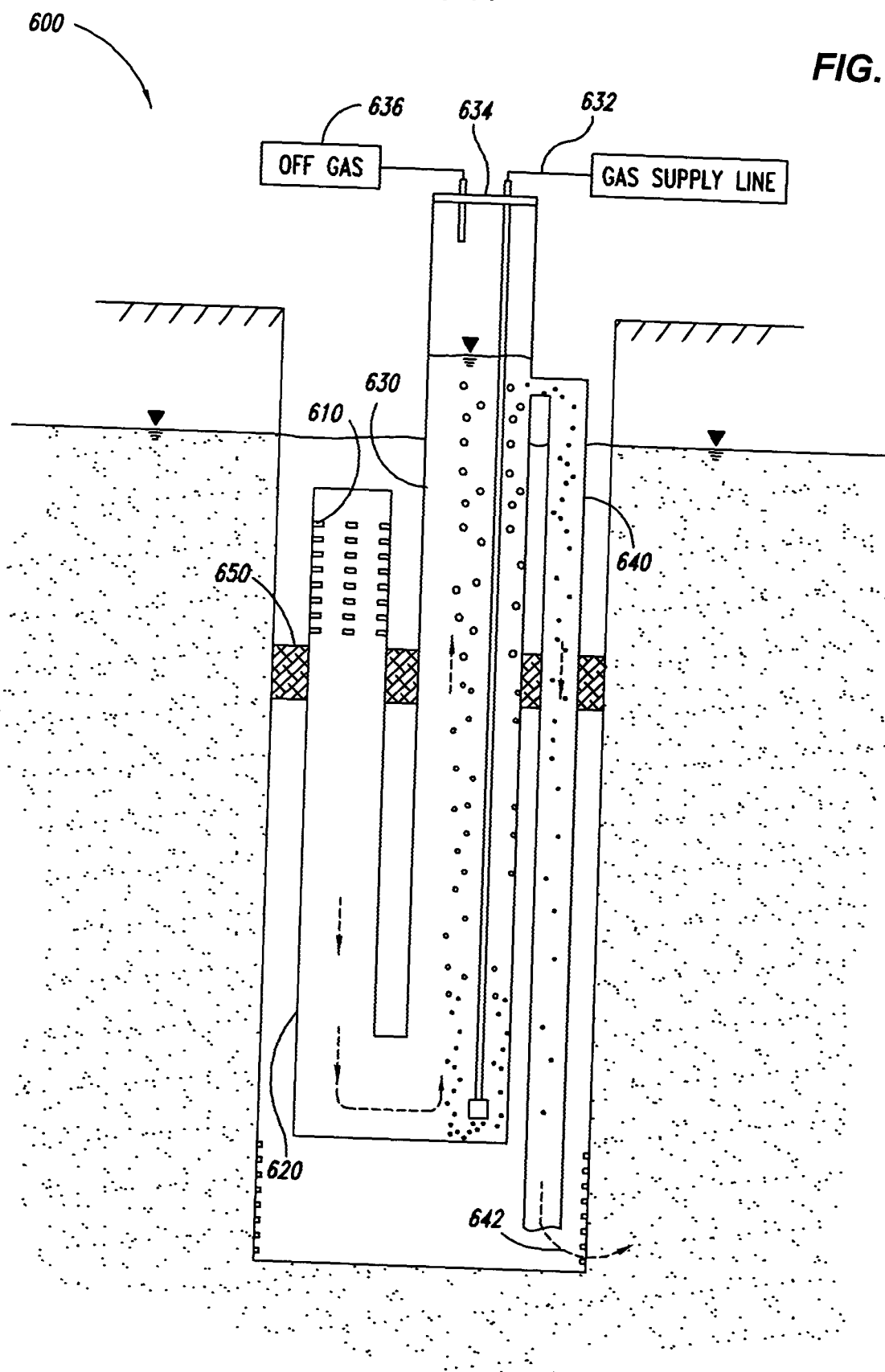
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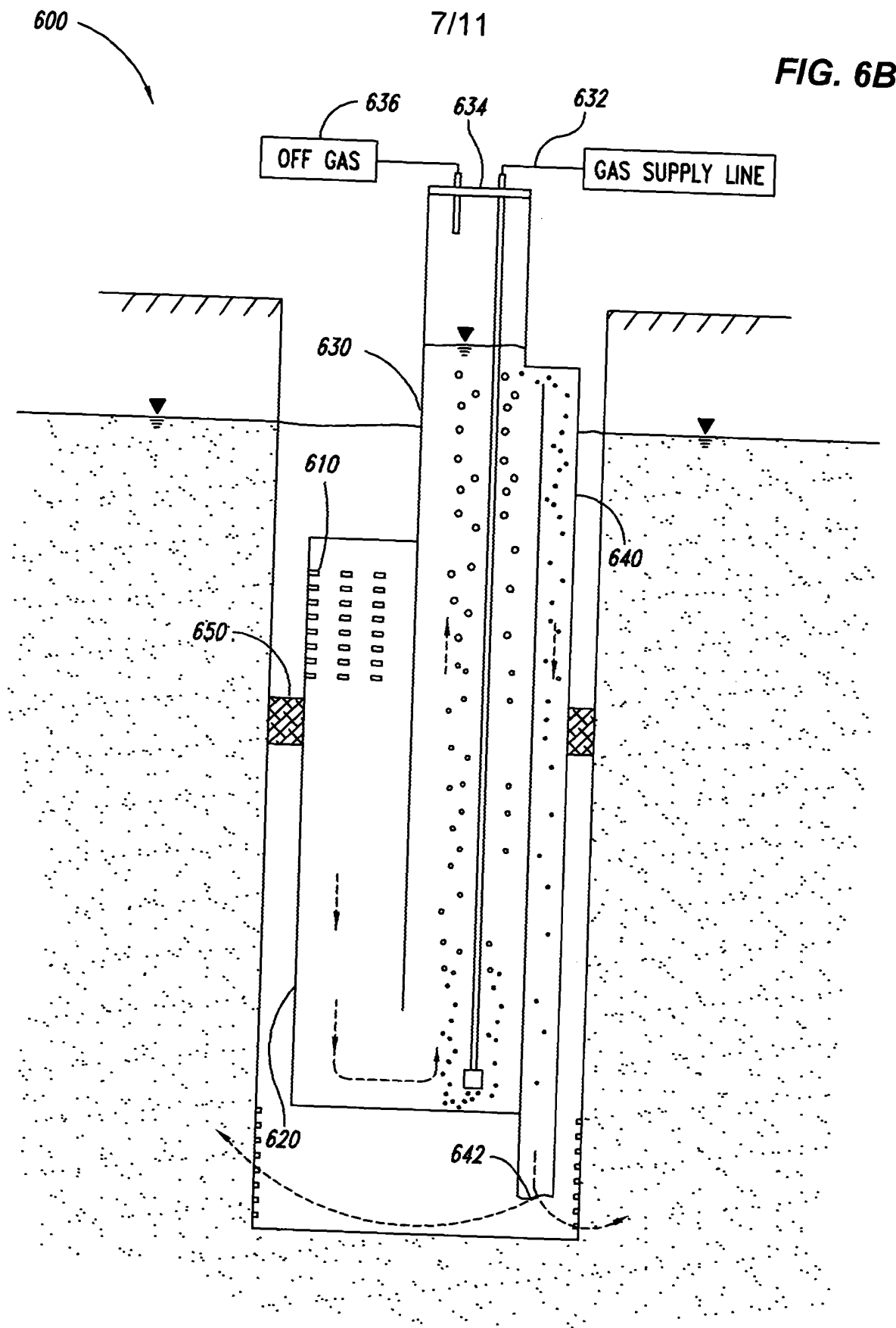
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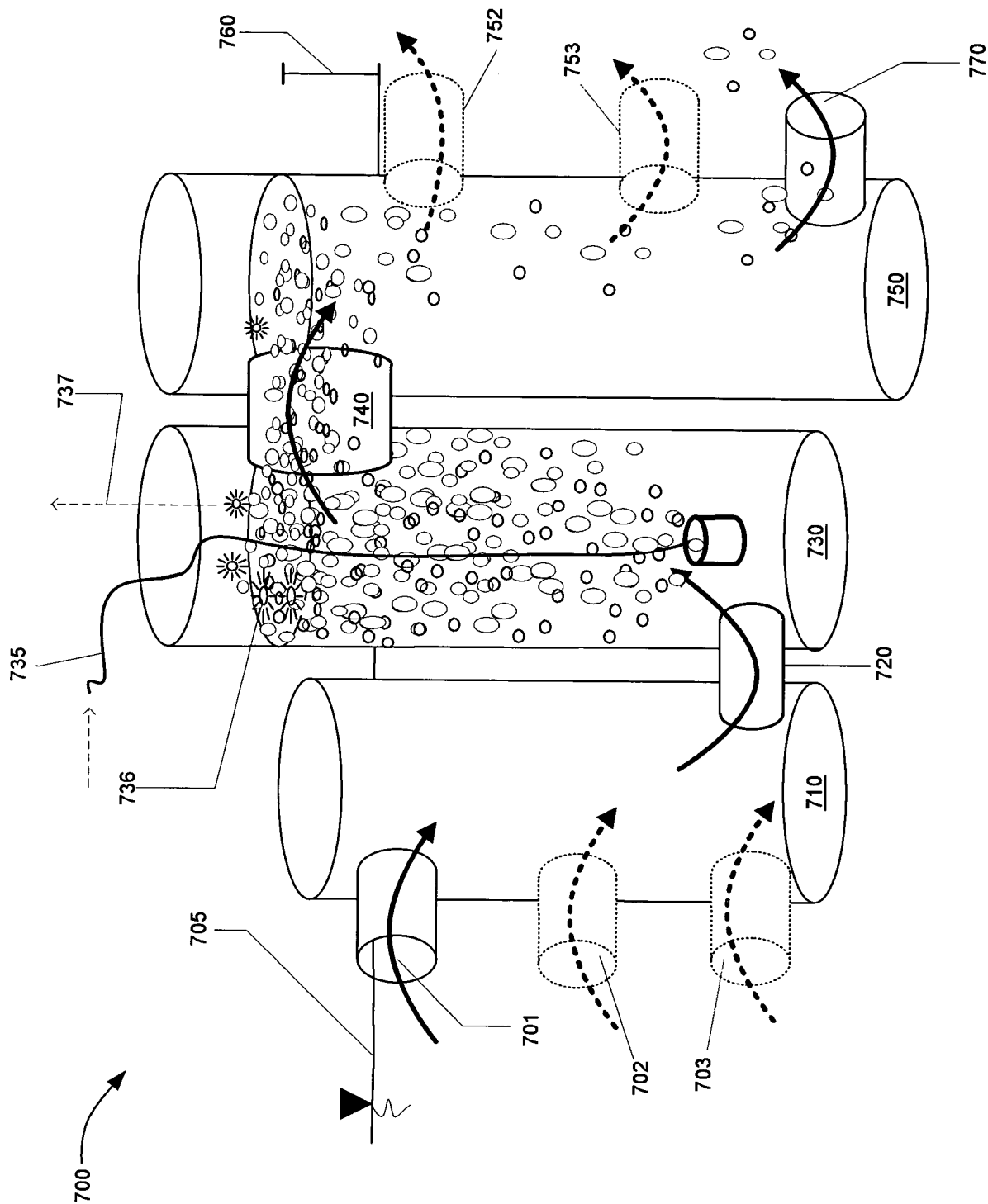
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FIG. 6A



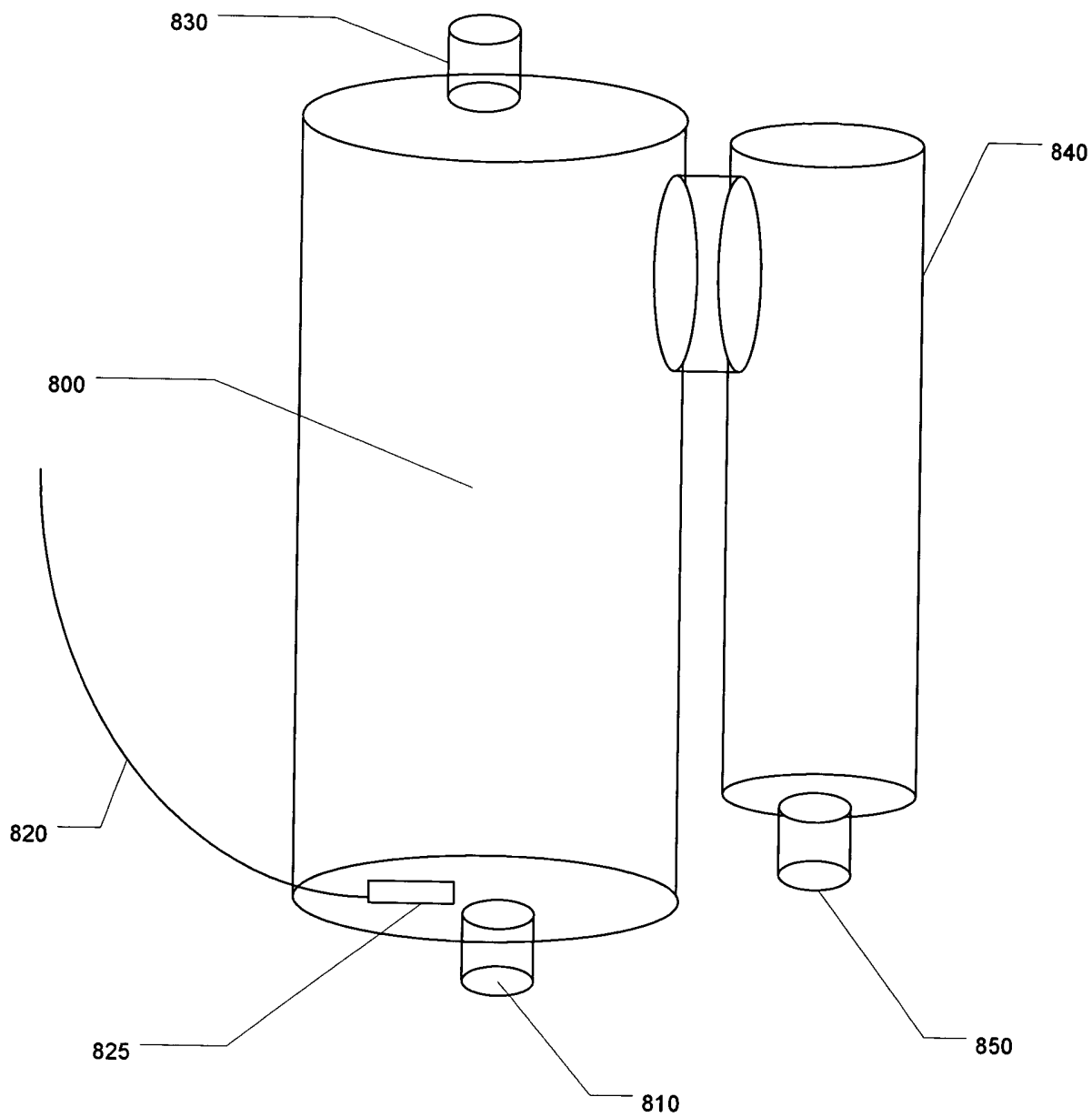




**FIG. 7**

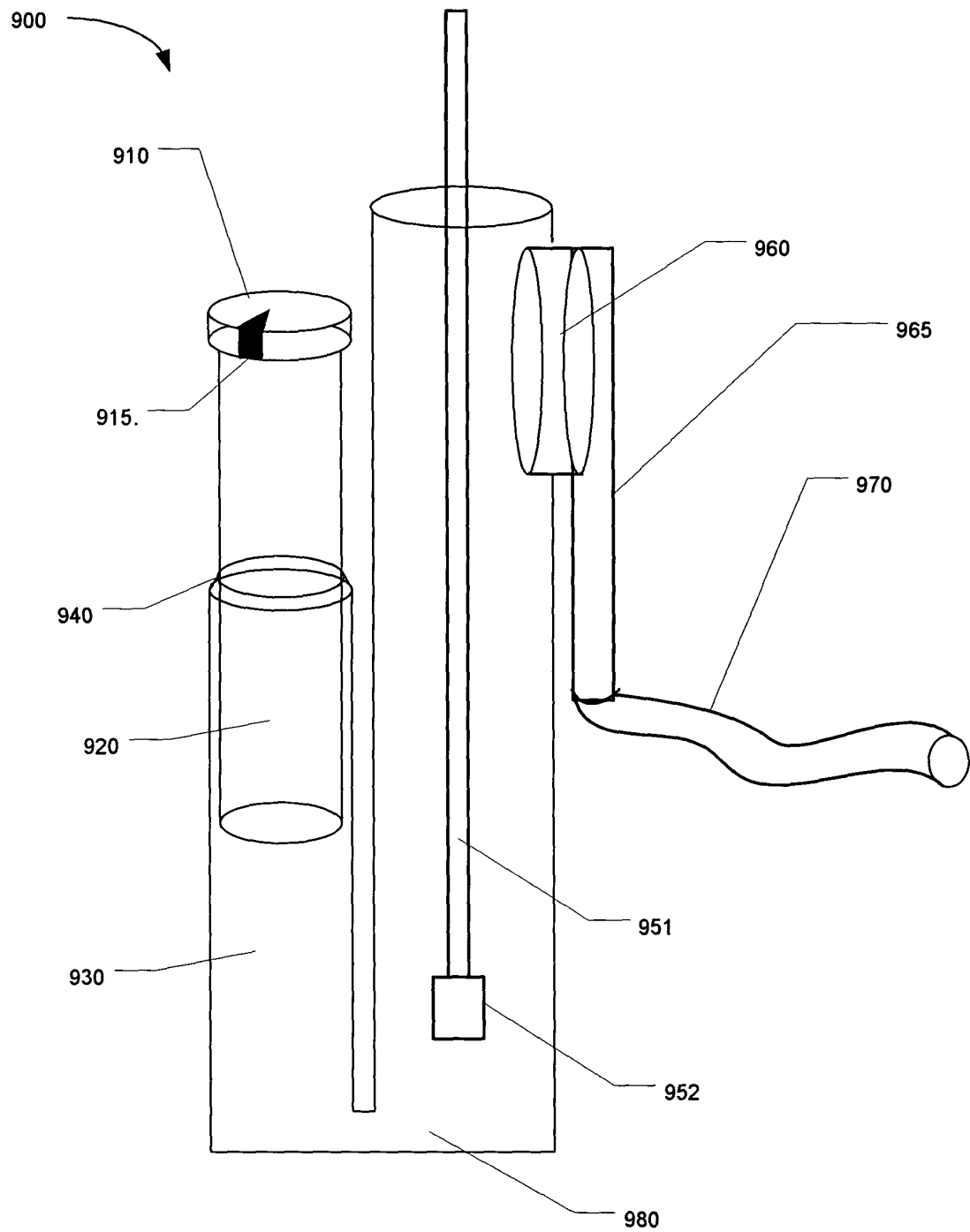
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**FIG. 8**



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**FIG. 9**

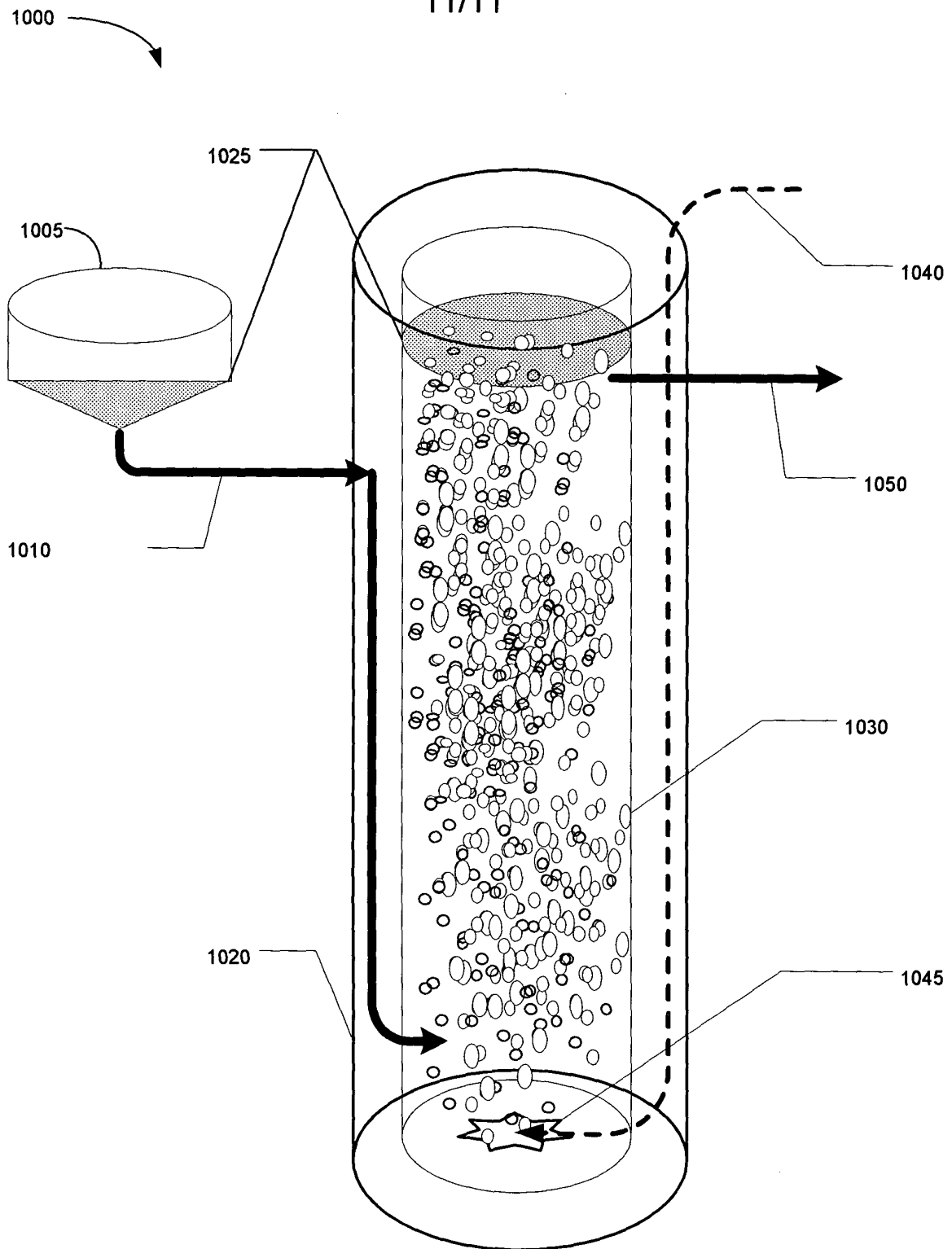


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**FIG. 10**